### **PATENT**

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

William G. SKENE

Serial No.: 10/597,722

Filed: August 4, 2006

For: CONJUGATED THIOPHENES HAVING

CONDUCTING PROPERTIES AND

SYNTHESIS OF SAME

Group Art Unit: 1625

Examiner: Unknown

Atty. Dkt. No.: BRKP:029US

Confirmation No.: 5400

CERTIFICATE OF ELECTRONIC TRANSMISSION 37 C.F.R. § 1.8

I hereby certify that this correspondence is being electronically filed with the United States Patent and Trademark Office via EFS-Web on the date pelow:

March 12, 2007

Date

Michael R. Krawzsenek

## <u>INFORMATION DISCLOSURE STATEMENT</u>

#### MS AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

In accordance with 37 C.F.R. §§ 1.97(g), (h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to

be an admission that the information cited is, or is considered to be, material to patentability as

defined in 37 C.F.R. § 1.56(b).

The present Information Disclosure Statement is being filed prior to the receipt of a first

Official Action reflecting an examination on the merits, and hence is believed to be timely filed

in accordance with 37 C.F.R. § 1.97(b). No fees are believed to be due in connection with the

filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R.

§§ 1.16 to 1.21 be deemed necessary for any reason relating to these materials, the

Commissioner is authorized to deduct the appropriate fees from Fulbright & Jaworski Deposit

Account No.: 50-1212/BRKP:029US.

Applicant respectfully requests that the listed documents be made of record in the present

case.

Respectfully submitted,

Michael R. Krawzsenek

Reg. No. 51,898

Attorney for Applicant

FULBRIGHT & JAWORSKI L.L.P. 600 Congress Avenue, Suite 2400 Austin, Texas 78701 (512) 474-5201

Date:

March 12, 2007

Form PTO-1449 (modified)				Atty. Docket No.: BRKP:029US	1	erial No.: 0/597,722	
List of Patents and Publications for Applicant's			Applicant: William G. SKENE				
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)				Filing Date: August 4, 2006		roup: 525	
			atent Documents see Page 1	Other Art See Page I			
<del></del>			U.S. Pater	nt Documents		<del>,</del>	
Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
Foreign Patent Documents							
Exam. Init.	Ref. Des.	Document Number	Date	Country		Language	
	Bl	WO 2004/003044	1/8/04	WIPO		Englis	sh
	Other A	Art (Including	g Author,	Title, Date Per	tinent F	Pages, I	Etc.)
Exam. Init.	Ref. Des.	Citation					
	C1	Blanchard <i>et al.</i> , "Bridged Dithienylethylenes as Precursors of Small Bandgap Electrogenerated Conjugated Polymers," <i>J. Org. Chem.</i> , 62:2401-2408, 1997.					
	C2	Brabec et al., "Plastic Solar Cells," Adv. Funct. Mater., 11:15-26, 2001.					
	C3	D'Alelio, "Polyazomethines," Encyclopedia of Polymer Science and Technology, 10:659-667, 1969.					
	C4	Elandaloussi <i>et al.</i> , "Effect of Chain Extension on the Electrochemical and Electronic Properties of π-Conjugated Soluble Thienylenevinylene Oligomers," <i>J. Am. Chem. Soc.</i> , 119:10774-10784, 1997.					
	C5 Jayakannan <i>et al.</i> , "Synthesis and Structure-Property Relationship of New Donor-Acceptor-Type Conjugated Monomers and Polymers on the Basis of Thiopene and Benzothiadiazole," <i>J. Polym. Sci. Part A: Polym. Chem.</i> , 40:251-261, 2002.						
	C6	Kintzel et al., "Ring-Chain Equilibrium between an [18]Cyclacene Derivative and a Ladder Oligomer," Eur. J. Org. Chem., 99-105, 1998.					
,	C7	Kraft et al., "Electroluminescent Conjugated Polymers – Seeing Polymers in a New Light," Angew. Chem. Int. Ed., 37:402-428, 1998.					
:	C8	Lavastre et al., "Discovery of New Fluorescent Materials from Fast Synthesis and Screening of Conjugated Polymers," J. Am. Chem. Soc., 124:5278-5279, 2002.					

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(Use several sheets if necessar	y)	Filing Date: August 4, 2006	Group: 1625
U.S. Patent Documents	Foreign l	Patent Documents	Other Art
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# Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C9	Leclerc, "Polyfluorenes: Twenty Years of Progress," J. Polym. Sci. Part A: Polym. Chem., 17:2867-2873, 2001.
	C10	Lemaire and Garreau, "Design of Poly(thiophene) Containing Oxyalkl Substituents," New J. Chem., 13:863-871, 1996.
	C11	MacDiarmid, "Synthetic Metals: A Novel Role for Organic Polymers (Nobel Lecture)," Angew. Chem. Int. Ed., 40:2581-2590, 2001.
	C12	Middleton et al., "Heterocyclic Compounds from Tetracyanoethylene," J. Am. Chem. Soc., 80:2822-2829, 1958.
	C13	Roncali <i>et al.</i> , "An Efficient Strategy Towards Small Bandgap Polymers: The Rigidification of the π-Conjugated System," <i>C. Adv. Mater.</i> , 6:846-848, 1994.
	C14	Roncali, "Conjugated Poly(thiophenes): Synthesis, Functionalization, and Applications," <i>Chem. Rev.</i> , 92:711-738, 1992.
	C15	Rowan et al., "Dynamic Covalent Chemistry," Angew. Chem. Int. Ed., 41:898-952, 2002.
	C16	Ruban and Zobel, "Die Kristallstruktur des trans-1,2-Di-2-thienyläthens," Acta Crystallogr. Section B Struct. Cyrstallogr. Cryst. Chem., 31:2632-2634, 1975.
	C17	Rupprecht, Conductive Polymers and Plastics in Industrial Applications, Plastics Design Library, Brookfield, Conn., 1999.
	C18	Skene and Dufresne, "Easy One-Pot Synthesis of Energy Transfer Cassettes," Org. Lett., 6:2949-2952, 2004.
	C19	Skene and Trefz, "Fast and Easy Synthesis of Conjugated Oligomers," <i>Polym. Mater.: Sci. &amp; Eng.</i> , 91:326-327, 2004.
	C20	Skene and Trefz, "New Synthetic Route for Conjugated Thiophenes," <i>Polym. Prepr.</i> , 45:563-564.
-	C21	Skene, "A Novel Synthetic Route For Conjugated Thiophenes," <i>Polym. Prepr.</i> , 45:252-253, 2003.
	C22	Sun et al., "The Synthesis and Characterization of Carbazolyl Azomethine," J. Polym. Prepr., 44:960-961, 2003.

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# Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C23	Vegh et al., "Organic conductors based on 2,5-diamino-3,4-dicyanothiophene and diaminomaleonitrile and their transformation to new phthalocyanine analogues," Chemistry of Heterocyclic Compounds, 31:1238-1240, 1995.
	C24	Wang et al., "Synthesis and Characterization of A New Conjugated Aromatic Poly(azomethine) Derivative Based on the 3',4'-Dibutyl-α-Terthiophene Building Block," Macromolecules, 29:3147-3156, 1996.
	C25	Yang and Jenekhe, "Conjugated Aromatic Poly(azomethines). 1. Characterization of Structure, Electronic Spectra, and Processing of Thin Films from Soluble Complexes, <i>Chem. Mater.</i> , 3:878-887, 1991.
	C26	Yang and Jenekhe, "Conjugated Aromatic Polyimines. 2. Synthesis, Structure, and Properties of New Aromatic Polyazomethines," <i>Macromolecules</i> , 28:1180-1196, 1995.
	C27	Zobel and Ruban, "Die Kristallstruktur des 2,5-Distyrylthiophens und des 2,5-Bis(2-thienylvinyl)-thiophens," <i>Acta Crystallogr. Section B Struct. Cyrstallogr. Cryst. Chem.</i> , 34:1652-1657, 1978.
	C28	Zong et al., "3,4-Alkylenedioxy ring formation via double Mitsunobu reactions: an efficient route for the synthesis of 3,4-ethylenedioxythiophene (EDOT) and 3,4-propylenedioxythiophene (ProDOT) derivatives as monomers for electron-rich conducting polymers," Chem. Commun., 2498-2499, 2002.

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